



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
Montana State Office
5001 Southgate Drive
Billings, Montana 59101-4669
www.blm.gov/montana-dakotas

In Reply Refer To:
3100 (MT922.AG)

December 8, 2017

CERTIFIED MAIL 7017 1450 0002 0088 9075
RETURN RECPEIPT REQUESTED

Diana Dascalu-Joffe
Center for Biological Diversity
1536 Wynkoop
Suite 421
Denver, Colorado 80202

CERTIFIED MAIL 7017 1450 0002 0088 9082
RETURN RECPEIPT REQUESTED

Jonathan Matthews
Montana Chapter of the Sierra Club
1601 N Benton Avenue
Helena, Montana 59625

CERTIFIED MAIL 7017 1450 0002 0088 9099
RETURN RECPEIPT REQUESTED

Marta Darby
Sierra Club National
2101 Webster Street
Suite 3100
Oakland, California 94612

DECISION

PROTEST DISMISSED

I. INTRODUCTION

On September 13, 2017, a Lease Sale Notice for the Miles City Field Office (MCFO), December 12, 2017, Competitive Oil and Gas Lease Sale was posted, which initiated a 30-day protest period. At the same time, the MCFO Oil and Gas Leasing Environmental Assessment (EA), updated after a 30-day public comment period, was made available to the public.

In a letter to the Bureau of Land Management (BLM) dated October 13, 2017 (Enclosure 1), the Center for Biological Diversity (CBD), the Montana Chapter of the Sierra Club, and Sierra Club National submitted a timely protest to the inclusion of 204 parcels located in the MCFO planning area, Montana.

II. BACKGROUND

Public scoping for this lease sale was conducted from May 16-30, 2017. This scoping period was announced in a press release issued by the Montana State Office. The MCFO also posted National Environmental Policy Act (NEPA) notification log, reference number DOI-BLM-MT-C020-2017-0051-EA. In addition, the Montana State Office mailed surface owner notification letters explaining the oil and gas leasing and planning processes. The letters requested written comments regarding any issues or concerns that should be addressed in the EA being prepared for the parcel. The MCFO received a total of five (5) scoping comments regarding the leasing process, split estate, and water resources. No scoping comments were received from the CBD or Sierra Club.

On July 10, 2017, the BLM Montana/Dakotas released the MCFO Oil and Gas Leasing EA for a 30-day public comment period. The EA analyzed the potential effects from offering 204 nominated lease parcels in Montana containing 98,889 acres of Federal Mineral Estate in the December 12, 2017, Competitive Oil and Gas Lease Sale. Relevant public comments received during this process were addressed in the EA, as appropriate. The CBD submitted comments on the EA at that time. The Sierra Club did not. The EA was updated and posted, along with the competitive sale list, on September 13, 2017, on the BLM's ePlanning website for a 30-day protest period.

After a review of potential environmental impacts presented in the EA and the public comments, the Miles City Field Manager recommended that 204 parcels be included in the December 12, 2017 lease sale. As a result of the Decision Record, a total of 204 nominated MCFO lease parcels (98,889 acres of Federal minerals) would be offered for lease at the MCFO, December 12, 2017, Competitive Oil and Gas Sale with lease stipulations and/or lease notices as necessary for the proper protection and conservation of the resources associated with the lease issuances.

III. PROTEST ANALYSIS

Protest Summary: The Center for Biological Diversity (CBD), the Montana Chapter of the Sierra Club, and Sierra Club National (Protesters) submitted a timely protest (via fax) dated October 13, 2017, to the inclusion of 204 parcels identified in the MCFO, December 12, 2017, Notice of Competitive Oil and Gas Lease Sale.

Protest Contentions and BLM Response:

A. BLM Failed to Adequately Disclose or Analyze Water Quality, Quantity and Recreational Impacts to the Tongue River Dam and Reservoir in violation of the National Environmental Policy Act (NEPA) - Parcels 12-17-07, 12-17-09, 12-1710, 12-17-11, 12-17-12, 12-17-13, 12-17-19, 12-17-20, 12-17-21, 12-17-22, 12-1723, 12-17-27, 12-17-28, 12-17-29.

NEPA demands that a federal agency prepare an EIS before taking a "major [f]ederal action significantly affecting the quality' of the environment." *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1067 (9th Cir. 2002). In order to determine whether a project's impacts may be

"significant," an agency may first prepare an EA. 40 C.F.R. §§ 1501.4, 1508.9. If the EA reveals that "the agency's action may have a significant effect upon the ...environment, an EIS must be prepared." *Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 730 (9th Cir. 2001) (internal quotations omitted). If the agency determines that no significant impacts are possible, it must still adequately explain its decision by supplying a "convincing statement of reasons" why the action's effects are insignificant. *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998). Further, an agency must prepare all environmental analyses required by NEPA at "the earliest possible time." 40 C.F.R. § 1501.2. "NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment," but is "designed to require such analysis as soon as it can reasonably be done." *Kern*, 284 F.3d at 1072.

NEPA establishes "action-forcing" procedures that require agencies to take a "hard look" at environmental consequences." *Ctr. for Biological Diversity v. United States DOI*, 623 F.3d 633, 642 (9th Cir. 2010). Chief among these procedures is the preparation of an EIS. *Id.* As demonstrated by the agency's generic and meager discussion of potential problems that could result from oil, gas and coal bed methane extraction and its failure to analyze the actual impacts of the lease sale, BLM's EA fails to take the requisite "hard look" at environmental impacts, in particular to the critical resource values provided to the region by the Tongue River Reservoir.

1. BLM failed to analyze water quality and quantity impacts from future conventional oil and gas development on the Tongue River Reservoir.

As discussed in detail in our comment letter on the EA, BLM failed to even acknowledge, let alone analyze, any impacts to the Tongue River dam and reservoir. Fourteen parcels of this sale lie on top of, or adjacent to the dam, reservoir and Tongue River Reservoir State Park. The Tongue River Reservoir is administered by the Tongue River Water Users' Association (TRWUA), and the reservoir itself stores water for 35 irrigators along the river. When full to capacity, the reservoir stores 150,000 acre-feet of water. Tongue River State Park is home to world class fishing and recreation found in Montana. Tongue River Reservoir State Park receives approximately 80,000 visitors annually.

The Tongue River basin is home to approximately 25,000 people, 88% of whom live in and around Sheridan, Wyoming. Water rights filing information demonstrates that claims for water from the basin are far in excess of its historic delivery capability. Just over 6,000 private water wells are drilled in the basin, 64% of which are in Montana, and most of which are for agricultural purposes. The EA fails to address any site-specific impacts from future oil and gas development to the Tongue River Reservoir's water quality or quantity. The region's agricultural community relies heavily on this water, which withdrawal reserves are already at or near capacity.

As detailed in our August comment letter, oil and gas extraction, especially coal bed methane extraction, is very water intensive. Some unconventional extraction techniques, most notably fracking, require the use of tremendous amounts of freshwater. Typically between two and 5.6 million gallons of water are required to frack each well. Such high levels of water use are unsustainable. Water used in large quantities may lead to several kinds of harmful

environmental impacts. The extraction of water for fracking can, for example, lower the water table, effect biodiversity, harm local ecosystems, and reduce water available to communities.

Withdrawal of large quantities of freshwater from streams and other surface waters will undoubtedly have an impact on the environment. Withdrawing water from streams will decrease the supply for downstream users, such as farmers or municipalities. Rising demand from oil and gas operators has already led to increased competition for water between farmers and oil and gas operators. For example, in prior years, farmers in Colorado have paid at most \$100 per acre-feet of water in auctions held by cities with excess supplies, but in 2013 energy companies paid \$1,200 to \$2,900 per acre-feet. Reductions in stream flows may also lead to downstream water quality problems by diminishing the water bodies' capacity for dilution and degradation of pollutants. The EA fails to address this impact, particularly in the Tongue River Basin where water-use for farming is paramount.

Furthermore, withdrawing large quantities of water from subsurface waters to supply oil and gas production will likely deplete and harm aquifers. Removing water from surface water or directly from underground sources of water faster than the rate that aquifers can be replenished will lower the volume of water available for other uses. Depletion can also lead to compaction of the rock formation serving as an aquifer, after which the original level of water volume can never be restored. Depleted aquifer water resources may also adversely affect agriculture, species habitat and ecosystems, and human health.

The freshwater in the area therefore would be greatly affected by the increased demand for water if fracking and other unconventional oil and gas extraction processes are permitted. The EA must analyze where water for oil and gas activities will be sourced, how much, and the effects on water sources under different alternatives. All of these effects must be analyzed in the context of increasing water scarcity in Montana due to climate change, drought, and increasing population growth. Failure to address these current and foreseeable future impacts on water usage in conjunction with the current demand for fresh water resources in the Tongue River Basin, is a clear violation of BLM's NEPA review requirements.

BLM Response:

No additional analysis is required at this time. As stated in Section 4.1 of the leasing EA,

The act of leasing parcels would not impact the resources. The only direct effects of leasing are the creation of valid existing rights and impacts related to revenue generated by the lease sale receipts. Potential indirect effects associated with a lease sale would result from any future developments. The BLM assumes there is a high interest in development of any leased parcels but, even if lease parcels are leased, it is uncertain whether or not development would actually occur; and if so, it is speculative to assume where specific wells would be drilled and where facilities would be placed. This would not be determined until the BLM receives an APD in which detailed information about proposed wells and facilities would be provided for particular leases. EA at 43.

Section 4.1 continues, "No surface disturbance would occur as a result of issuing leases." "Upon receipt of an APD, the BLM would coordinate with the appropriate SMA and initiate a more site-specific

NEPA analysis with public review opportunities to more fully analyze and disclose site-specific effects of specifically identified activities.” EA at 43-44. At that time, any additional mitigation and conditions of approval would be identified to address potential future impacts that arise in the site specific analysis. The site specific analysis that is recommended at this time by the Protesters would be impractical, highly speculative, and exceed the scope of this NEPA document.

The 2015 Miles City Field Office RMP did a robust analysis of cumulative impacts at the field office level, using an up-to-date Reasonably Foreseeable Development scenario (RFD). Due to the fact that there are no ground-disturbing activities authorized at the leasing stage, it is appropriate to reference/tier to the RMP level cumulative effects analysis, and to state that additional site-specific analysis will be completed if/when an APD is received. At this point, the analysis would not include information about potential impacts to resources, well locations, any roads or ancillary facilities, etc. that are not known at the leasing stage.

Within the leasing EA, the MCFO identifies parcels that contain water resources (Appendix A) and tiers to/incorporates by reference all impacts from the MCFO Final EIS 2015, which includes analysis of impacts from oil, gas and coal bed methane extraction on water resources (pages 4-46 through 4-69). In response to this review, oil and gas lease stipulations NSO 11-70 (Streams, waterbodies, riparian, wetland, and 100-year floodplains), NSO 11-71 (Source water protection areas), and CSU 12-25 (wetland and riparian areas 300 ft buffer) were applied to corresponding parcel lands (see Appendix A).

CSU 12-25- RIPARIAN, WETLANDS

Stipulation: Surface occupancy and use is subject to the following operating constraints: prior to surface occupancy and use within 300 feet of riparian and/or wetland areas, a plan must be approved by the AO with design features that demonstrate how all actions would maintain and/or improve the functionality of riparian/wetland areas. The plan would address:

- potential impacts to riparian and wetland resources,
- mitigation to reduce impacts to acceptable levels (including timing restrictions),
- post-project restoration, and
- monitoring (the operator must conduct monitoring capable of detecting early signs of changing riparian and/or wetland conditions).

Objective: To protect the unique biological and hydrological features associated with riparian and wetland areas. Disturbances adjacent to riparian and/or wetland areas (including road use) can adversely impact these sensitive areas. This stipulation would protect these features from indirect effects produced within the adjacent ground. This would also encompass the floodplain along most first to third order streams.

NSO 11-70- STREAMS, WATERBODIES, RIPARIAN, WETLAND, AND FLOODPLAINS

Stipulation: Surface occupancy and use is prohibited within perennial or intermittent streams, lakes, ponds, reservoirs, 100-year floodplains, wetlands, and riparian areas.

Objective: To protect the unique biological and hydrological features and functions associated with perennial and intermittent streams, lakes, ponds, reservoirs, floodplains, wetlands, and riparian areas.

NSO 11-71- SOURCE WATER PROTECTION AREAS

Stipulation: Surface occupancy and use is prohibited within State-designated Source Water Protection Areas.

Objective: To protect human health by minimizing the potential contamination of public water systems. Source water is untreated water from streams, rivers, lakes, or aquifers used to supply public water systems. Ensuring that source water is protected from contamination can reduce the costs of treatment and risks to public health. This stipulation would protect the State-designated Source Water Protection Areas that protect public water systems from potential contamination.

2. BLM failed to analyze coal bed methane extraction impacts on the Tongue River Reservoir.

Despite the MCFO's acknowledgment in its 2015 Reasonably Foreseeable Development Scenario that 15% or more of potential new wells within the MCFO are projected to be coalbed methane (CBM, also referred to as coalbed natural gas or CBNG), MCFO RMP EIS Appendix D at Min-91 & Table 3, the EA fails to disclose or analyze the potential for individual proposed lease parcels to result in CBM drilling, and associated produced water disposal. The question of CBM potential has very significant implications for the environmental consequences of the proposed leasing action, and is ignored entirely by BLM's EA. BLM's acknowledgment of the issue, however, is limited to the statement that the "Fort Union Formation... [is] the source for two coal mines operating in Big Horn County, Spring Creek and Decker, as well as coalbed natural gas wells in the area. Despite the acknowledgment that numerous proposed parcels overlap coal seams, leases, and mines, the EA contains no discussion or analysis of the likelihood of CBM development or its consequences.

CBM development has significant environmental consequences not disclosed in the EA: (1) greater intensity of surface use, with ensuing impacts to both wildlife habitat and split-estate surface owners; and (2) significant quantities of saline produced water, the disposal of which poses risks to soils, surface water, wildlife, and agricultural and other land uses.

First, BLM acknowledges that coalbed methane development is likely to be more intensive in its fragmentation of the surface, and in its resulting effects to greater sage-grouse habitat, than "conventional" drilling:

From 2001 to 2005, GRSG populations declined by 82 percent within the expansive coal bed natural gas fields (Walker et al. 2007a) in northeast Wyoming. Within the Miles City planning area, energy development is less widespread than in Wyoming. Within GRSG habitat in the Miles City planning area, 267,000 acres of federal fluid minerals (83,000 BLM-administered surface acres) are considered to be high potential for oil and gas development and 718,000 acres of federal fluid minerals (370,000 BLM-administered surface acres) are in areas with medium potential for oil and gas development.

The Powder River Basin has had extensive development of coalbed natural gas in the last 10 to 15 years, fragmenting GRSG habitat throughout that area. With a well life of approximately 12 years, many of the coal bed natural gas wells that were originally drilled are depleted and ready for abandonment. Native vegetation over most buried pipelines has reclaimed its pre-disturbance composition. Utility roads and overhead power lines continue to degrade thousands of acres of GRSG habitat on private, federal, and state lands resulting in avoidance of otherwise suitable habitat (BLM 2013b).

Though the BLM may restrict future leasing for oil and gas on Federal fluid mineral estate that it administers in GRSG habitat, existing leases remain valid unless they have already been developed, at which point they are valid for the life of the producing well. Any new development of wells on existing leases is subject to Conditions of Approval to avoid other resource damage, including GRSG.

The Powder River Basin contains substantial energy resources, including oil, natural gas, and coal bed natural gas (USFWS 2013, pp. 64-65); conversely, the northern Montana population has less energy development. Coal bed methane wells typically last 12 to 18 years, while oil and gas wells may last 20 to 100 years in production (Connelly et al. 2004). Most coal bed natural gas drilling in the Powder River Basin has concluded and current and future oil and gas development is anticipated to impact GRSG less due to horizontal drilling technology.

The possibility of new CBM development undermines BLM's assumption that new drilling will "impact GRSG less due to horizontal drilling technology."

Second, coalbed methane development in the Powder River Basin is well-known to be associated with the production of large quantities of saline wastewater as a result of the need to dewater coal seams to produce gas. As summarized in a 2010 report by the National Academy of Sciences, CBM produced water poses significant treatment and disposal challenges, and has the potential for significant adverse effects on groundwater aquifers (quantity and quality), surface water quality, aquatic ecosystems and wildlife, soil quality and agricultural production, and physical effects on stream condition and hydrology.

As of 2010, the Montana portion of the Powder River Basin faced substantially less existing coalbed methane development than the Wyoming side, with only two permitted CBM operations. One of those operations produces more than 95% of all produced CBM water in Montana, and, under the 2010 Montana Supreme Court decision *in Northern Cheyenne Tribe v. Montana Dep't of Env'tl Quality*, is required to treat its produced water prior to discharge into the Tongue River.

Substantiated effects of CBM produced water found by the National Academy of Sciences include:

- (1) Drawdown of groundwater levels in coalbeds as result of pumping water from coalbeds during CBM extraction

- (2) Changes in groundwater quality associated with CBM produced water in surface impoundments
- (3) Effects on surface water quality due to discharge to perennial streams and rivers, ephemeral drainages, and surface impoundments
- (4) Effects on soil quality and agricultural production, including soil quality deterioration as a result of elevated sodicity of CBM produced water
- (5) Ecological effects due to "[p]roduction [of] numerous chemical constituents . . . several of which are potentially toxic to fish, macroinvertebrates, and other aquatic organisms"

Specifically for Montana, the extent of groundwater aquifer drawdown is predicted to increase in the future as CBM production increases. The EA contains no discussion or analysis of either (1) how additional potential-CBM leasing may contribute to this groundwater drawdown, (2) how such drawdown may affect alluvial aquifers that supply domestic and/or livestock water, or (3) how such drawdown may affect the base flow of perennial water sources. Water levels in the Anderson-Dietz and Canyon coals currently exploited for CBM in Montana are anticipated to take decades to return to original levels after pumping.

The Tongue River, due to lesser levels of CBM development and more stringent water quality requirements in Montana than Wyoming, has in one study met water quality standards for two major measures of salinity (sodium absorption ratio, or SAR, and specific electrical conductance, or SC/EC). Newer research, however, indicates that CBM produced water is increasing or has the potential to increase both electrical conductance and SAR in the Tongue River.

Increased BLM leasing of federal minerals for potential CBM development, however, may have the potential to increase permitted discharge to the Tongue River, with resulting effects on water quality. As the Montana Supreme Court has found, "The groundwater associated with CBM extraction contains a naturally high saline content. The highly saline groundwater may degrade the quality of the receiving surface waterway. Surface waters degraded by CBM discharge water, in turn, may have an adverse effect on irrigated water and aquatic life. In fact, federal law defines the discharge water associated with CBM extraction as a 'pollutant' under the Clean Water Act (CWA)." Although one study found that surface water in Montana currently suffers relatively little effect from CBM production, BLM cannot ignore the fact that increased leasing within the Fort Union Formation has the potential to lead to renewed CBM development, and resulting increases in produced water disposal.

Those water quality impacts are significant. As the NAS study summarized: Two studies of water quality in ephemeral streams have demonstrated that pH, specific conductance, and SAR values and concentrations of TDS, alkalinity, sodium, calcium, magnesium, potassium, arsenic, and selenium in CBM discharge water increased as discharged water traveled downgradient in ephemeral stream channels, while iron and manganese concentrations decreased. Once CBM produced water discharge stopped, TDS concentrations in these same ephemeral streams were higher than before CBM produced water was discharged to the stream channel.

Apart from effects on ground and surface waters, CBM produced water has well-documented adverse effects on the quality and agricultural productivity of soils. As the NAS study reports:

Potential effects of produced water on agricultural landscapes have been investigated extensively in the Powder River Basin. Browning et al. (2007) reported that soils repeatedly wetted with simulated Powder River Basin CBM produced water resulted in significant changes in chemical and physical properties over time, despite incidental simulated rainfall events. Irrigated soils, dominated by clay-sized particles, had consistent increases in water-holding capacity, leading to water-logged characteristics, while drought-prone soils (coarsegrained) lost their water-holding capacity, thereby rendering the soils even more prone to drought. Vance et al. (2008) reported that CBM produced water can cause modification of soil density and aeration, low plant-available water capacity, low hydraulic conductivity, increased swelling, and uneven soil wetting. Application of CBM produced water from the Powder River Basin over multiple years increased soil electrical conductivity (EC) and SAR to depths of 30 centimeters. Irrigation with CBM produced water also reduced surface infiltration rates and subsurface flow rates in the top 120 centimeters (Vance et al., 2008).

Surface irrigation is one of the two principal water management methods for CBM produced water in the Montana portion of the Powder River Basin. In offering new oil and gas leases within CBM-bearing formations, BLM cannot ignore the readily foreseeable indirect effects of CBM produced water disposal. Yet the EA fails to disclose any information regarding the quantity and/or quality of water likely to be produced, and the potential pathways for its disposal, including treated disposal into the Tongue River or irrigation use, with resulting effects on soil quality and agricultural productivity.

The possibility of discharge to the Tongue River also may have significant ecological effects not necessarily addressed by Montana DEQ water quality standards. CBM produced water has multiple constituents toxic to aquatic organisms and not necessarily regulated:

CBM produced waters typically contain numerous chemical constituents (see Table 5.1), several of which are potentially toxic to fish, macroinvertebrates, and other aquatic organisms, when concentrations exceed toxicity threshold levels for these organisms. Stressors (whether described as constituents or contaminants that put stress on target species) of primary concern associated with CBM discharges include aluminum, arsenic, barium, beryllium, iron, manganese, and selenium, increased turbidity and TDS. Recent studies have also examined the toxicological effects of sodium bicarbonate, an ion of abundance in most CBM water. Most published research investigating these stressors indicates that increases in TDS have the greatest potential for direct toxicological impacts in receiving streams and rivers (Boelter et al., 1992; Confluence Consulting, 2004; Davis et al., 2006; Skaar et al., 2006; Farag et al., 2010). Recent studies have shown considerable ion in the toxicity of TDS due to the difference in relative concentrations of specific ions comprising TDS (Mount et al., 1997; Dwyer et al., 1992). Specific ionic composition will also change seasonally and among watersheds (Pillard et al., 1999). Details of existing laboratory studies on the effects of TDS, of interactions between elevated TDS and other stressors, of sodium bicarbonate on organisms, and of field studies on the effects of CBM produced water on organisms are outlined in subsequent sections.

TDS as a Measure of Toxicity:

Many freshwater organisms are highly sensitive to changes in salinity, and discharge of high TDS effluents into receiving systems may result in physiologically stressful conditions due to alterations in osmotic conditions. Most of the available research on sensitivity to TDS and salinity used laboratory toxicity tests to predict responses of fish and macroinvertebrates and focused on conventional test species. These studies are used to understand the potential significance of various constituent concentrations to organisms. In laboratory tests on standard test organisms, major ions such as chlorine, bicarbonate, sulfate, sodium, calcium, magnesium, and potassium in combination with elevated TDS have been found to be toxic to some aquatic species (e.g., Goodfellow et al., 2000; Goetsch and Palmer, 1997; Pillard et al., 1999; Dickerson and Vinyard, 1999; Chapman et al., 2000; Soucek, 2007).

Other studies found that direct exposure to CBM produced water, including from the Fort Union Formation, could potentially be toxic to up to 60% of aquatic organisms. Although numerous factors influence real-world toxicity, BLM's EA again makes no effort to disclose or analyze the quantities of CBM produced water that could result, or the toxic constituents of those waters. It should be noted, however, that field studies show a wider range of fish species surviving in waters unaffected by CBM produced water than in those receiving CBM water. In order to take NEPA's required hard look at indirect effects, BLM must make use of available scientific information to evaluate potential CBM water production, disposal, and resulting ecological effects.

Finally, in addition to toxicity, CBM water disposal effects the physical composition of perennial and ephemeral waters through physical change to drainages from erosion. These effects have the potential to harm both the ecological function of streams, and the agricultural uses of surface lands; the EA makes no mention of this foreseeable environmental effect.

BLM Response:

See response to A.1 above.

Within the leasing EA, the MCFO tiers to and incorporates by reference all impacts from the MCFO Final EIS 2015. The MCFO RMP includes analysis of potential impacts to water resources and riparian-wetland habitats from oil, gas, and coal bed methane extraction (pages 4-46 through 4-69, and pages 4-79 through 4-94 respectively). Impacts were incorporated by reference in the respective chapter 4 resource sections within the lease sale EA. In addition, oil and gas stipulations NSO 11-70 (Streams, waterbodies, riparian, wetland, and 100-year floodplains), NSO 11-71 (Source water protection areas), and CSU 12-25 (wetland and riparian areas 300 ft buffer), were applied to appropriate parcel lands (see above and Appendix A).

The following analysis in the 2015 MCFO FEIS describes potential adverse impacts to water resources from CBNG development.

Produced water from conventional oil and gas, uranium recovery, and CBNG development would impact the quality of surface water and groundwater through impoundments, injection,

and discharge. Impounding or discharging produced water would increase evaporative losses of groundwater. Left untreated, produced water discharge and infiltration or leaking produced water disposal pits could reach stream channels via subsurface flow, which would decrease water quality. Proper siting and design of disposal pits would mitigate these impacts. Underground injection control regulations would isolate injection zones from potentially useable aquifers, which would limit the impacts. FEIS at 4-54.

Drawdown in coal seams after 20 years of CBNG development is expected to be 20 feet within 5 miles of development, which would impact groundwater wells completed in these developed coal seams. These wells would have reduced yields but would not be expected to become dry because the aquifer would remain saturated. Within 3 to 4 years of the end of development, recovery would be expected to be within 20 to 30 feet of pre-development conditions, with complete recovery within hundreds of years (BLM 2008g [Final Supplement to the Montana Statewide Oil and Gas Environmental Impact Statement and Proposed Amendment of the Powder River and Billings Resource Management Plans. October 2008]). "Little evidence exists to substantiate that surface water has been depleted by pumping water during CBM [CBNG] production at the large watershed scale" in the PRB (NAS 2010, p. 185). FEIS at 4-54.

B. BLM's Failure to Adequately Disclose or Analyze the Impacts to Greater Sage-Grouse Violates BLM Regulations Regarding Conservation of Bureau Sensitive Species and the Greater Sage Grouse Resource Management Plan Amendments (180 Parcels Containing Greater Sage-Grouse General Habitat Management Areas).

BLM's EA and proposed FONSI violate both NEPA and FLPMA by (a) failing to disclose or evaluate site-specific indirect and cumulative impacts to greater sage-grouse populations and habitat from oil and gas development, and (b) failing to conform to the amended Miles City Resource Management Plan's mandatory requirement to prioritize leasing outside of greater sage-grouse habitat.

The EA completely fails to analyze site-specific impacts of oil and gas development on important wildlife areas, including 180 parcels within greater sage-grouse General Habitat Management Areas (GHMA), 45 of which are within 2 miles of a greater sage-grouse lek. BLM Manual 6840 requires the agency "[t]o initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA." Manual 6840 further states that it is the BLM's Policy to promote the "conservation and to minimize the likelihood and need for listing" Bureau sensitive species. Piecemeal analyses of individual lease sales does not provide the appropriate perspective for examining and developing the proactive conservation measures necessary to reduce or eliminate landscape-level cumulative threats to greater sage-grouse from oil and gas leases.

Furthermore, pursuant to Manual 6840 it is the responsibility of State Directors to not only inventory BLM lands to determine the occurrence of BLM special status species, but also to determine "the condition of the populations and their habitats, and how discretionary BLM actions affect those species and their habitats." The leasing of federal lands for oil and gas

extraction is a discretionary BLM action that has the potential to adversely affect the sensitive greater sage-grouse.

Moreover, the greater sage-grouse is not just a BLM sensitive species, but one that has led to a massive revision of BLM land use plans throughout the west in an effort to stave off its extinction. The U.S. Fish and Wildlife Service ("USFWS") identified in 2010 that the greater sage grouse warranted Endangered Species Act protection, that it faced numerous threats to its continued survival, and that inadequacy of regulatory mechanisms in general (and the inadequacy of protections in federal land-use plans in particular) were contributing to the need to list the species. In September 2015, the Service declined to list the species, citing, in part, BLM's recent sage-grouse RMP amendments. We have contended, and continue to contend, that those plans do not provide the level of protection that the best available science says is necessary to reverse sage-grouse decline and recover the species. However, the 2015 RMP amendments do incorporate a great deal of information and analysis regarding the species and effects of oil and gas development, and adopt both mitigation requirements for development within various categories (priority, general, and restoration habitat management areas) and an accompanying mandate to "prioritize" leasing outside of sage-grouse habitat, both priority and general.

BLM's proposed decision to lease the parcels within Priority Habitat Management Areas (PHMAs), General Habitat Management Areas (GHMAs) or Restoration Habitat Management Areas (RHMAAs), will not conform to the Amended RMPs and the agency's IM 2016-143 unless the leasing EIS fully evaluates site-specific impacts to Greater Sage-Grouse, and prioritizes leasing outside both PHMAs and GHMAs. Failure to conform to the mandatory requirements of the approved Resource Management Plan is a violation of FLPMA and its implementing regulations.

IM 2016-143's purpose is to provide consistency across the agency when leasing decisions impact Greater Sage-Grouse habitat. It provides a "prioritization sequence" for BLM state offices to follow when choosing to lease areas near or in Greater Sage-Grouse habitats. The IM prioritization sequence is as follows:

1. Lands outside of GHMAs and PHMAs: BLM State Offices will first consider leasing EOIs for lands outside of PHMAs and GHMAs. These lands should be the first priority for leasing in any given lease sale.
2. Lands within GHMAs: BLM State Offices will consider EOIs for lands within the GHMAs, after considering lands outside of both GHMAs and PHMAs. When considering the GHMA lands for leasing, the BLM State Office will ensure that a decision to lease those lands would conform to the conservation objectives and provisions in the GRSG Plans (e.g., Stipulations).
3. Lands within PHMAs: BLM state offices will consider EOIs for lands within PHMAs after lands outside of GHMAs and PHMAs have been considered, and EOIs for lands within GHMA have been considered. When considering the PI-IMA lands for leasing, the BLM State Offices will ensure that a decision to lease those lands would conform to the

conservation objectives and provisions in the GRSG Plans (e.g., Stipulations) including special consideration of any identified SFAs.

IM 2016-143 at 4.

According to BLM's EA, nearly the entire proposed lease sale (180 parcels) falls within GHMA. Forty-five parcels in GHMA habitat also fall within two miles of leks, which provide 'important life-history habitat features,' IM 2016-143 at 10. Under the sage-grouse RMP amendments and prioritization policy, BLM must consider, prior to determining to issue leases, factors including proximity to existing leases, oil and gas potential, and, importantly the proximity of the proposed leases to "important life-history habitat features (for example, distance from any active sage-grouse leks)." IM 2016-143 at 4.

IM 2016-143 further instructs BLM that "[a]t the time the leasing priority is determined, when leasing within GHMA or PHMA is considered, BLM should consider, first, areas determined to be non-sage-grouse habitat and then consider areas of lower value habitat." *Id.* The EIS must contain sufficient detailed, site-specific analysis to provide BLM and the public with sufficient information to permit a reasonable determination of whether the proposed leasing action could be limited to areas of either non-sage-grouse habitat or areas of lower value habitat. Appendix D to the EA fails entirely to engage in any site-specific analysis or weighing of the values of the proposed lease parcels for either greater sage-grouse habitat needs or mineral potential. Instead, Appendix D merely recites the factors in IM 2016-143, without any analysis whatsoever. The Miles City Field Office Resource Management Plan expressly requires that "Priority will be given to leasing and development of fluid mineral resources . . . outside of PHMA and GHMA."

Any proposed leasing must conform to a key management prescription of those plans - the obligation to "prioritize the leasing and development of fluid mineral resources outside GRSG habitat." The BLM is subject to clear direction in the IM 2016-143 and the RMP amendments that its sage-grouse RMP plans and conservation strategy rely not only on stipulations within designated habitats, but also on a larger strategy of prioritizing development outside of all sage-grouse habitats. Leasing 180 parcels of GHMA without adequate consideration of impacts on grouse populations and life history requirements, has the potential to violate IM 2016-143 and the Greater Sage-Grouse RMP amendments. It is simply impossible to understand how offering leases within sage-grouse habitat is consistent with the IM 2016-143 prioritization sequence and the RMP requirement to prioritize leasing outside such habitat.

BLM has also arbitrarily refused to consider reasonable alternatives other than the alternatives of no leasing and leasing all proposed sage-grouse habitat. In their comments on the Draft EA, the Wilderness Society proposed an alternative that would exclude from leasing, pursuant to the prioritization objective and IM 2016-143, over 130 lease parcels that are both (a) isolated from existing leases, and (b) classified by BLM as "low potential" for oil and gas. BLM's only response to this reasonable alternative is to state that "[t]he BLM is following the guidance in IM 2016-143 regarding prioritizing leasing outside GRSG habitat, and chose to defer many of these GRSG parcels for almost two years now; therefore, there is no need to analyze a separate alternative analyze prioritizing leasing outside habitat. The conclusion does not follow- BLM

is not relieved of its obligation under NEPA to consider all reasonable alternative simply because it has previously delayed a decision.

In the Response to Comments, BLM responds to multiple commenters raising the agency's failure to prioritize leasing outside of greater sage-grouse habitat by noting that (1) four lease sales since the 2015 plan amendments have included minimal PHMA, and (2) that BLM deferred some sage-grouse habitat within the proposed Miles City December 2017 sale for nearly two years. Neither of these responses amounts to a reasoned consideration and balancing of the factors in IM 2016-143. Nor has BLM offered any evidence that the condition of greater sage-grouse populations and habitat in the relevant Management Zone (MZ I) has changed for the better so drastically in those two years that it is justified in ignoring its obligation to prioritize leasing outside both GHMA and PHMA as required by the approved RMP.

It is undisputed that sage-grouse populations in central and eastern Montana are vastly reduced from pre-development levels due to habitat loss, a major source of which is oil and gas development and related disturbance. Greater Sage-Grouse Management Zone I, which includes the MCFO, BLM has found that "GRSG populations across M[anagement] Z[one] I face pressures from energy development, conversion to agriculture, and such stressors as disease, drought, and fire. These threats are magnified under the stress of habitat fragmentation and the isolation of small populations in the Dakotas, on the eastern edge of the species' range." Miles City Field Office Proposed Resource Management Plan Amendments FEIS 4-176. In its EIS for that Resource Management Plan amendment, the BLM acknowledges that even if the plan is implemented, sage-grouse populations may continue to decline or may persist at a "reduced level." MCFO PRMP FEIS at 4-176. In considering whether or not to make available for leasing additional sage-grouse habitats in the MCFO, BLM must assess the current state of sage-grouse populations in management zone I, the individual populations and seasonal habitats that may be affected by the proposed leases, and the implications of development for local and regional grouse survival and recovery.

In the spring, during the breeding season, sage grouse males seek out courtship areas, known as "leks" that are open areas of bare soil, short grass steppe, windswept ridges, or exposed knolls in which to gather and perform their ritualized mating displays and breed with females. An important factor affecting lek location appears to be proximity to, as well as configuration and abundance of, nesting habitat. Leks are normally "traditional", and occur in the same location each year. Some leks studied by early investigators have persisted for 28-67 years since first counted. The presence of broken bird-point arrowheads on some leks suggests that sage-grouse had used those sites for at least 85 years. Leks and the number of attending males are regularly used to monitor the long-term status of populations because of their traditional locations.

In a recent study looking at greater sage-grouse across six western states, it was reported that 90% of the active leks were surrounded by areas having greater than 40% sagebrush cover. Further, 99% of the active leks were in landscapes with less than 3% of the area in human development. Successful leks occurred in areas with low road densities - less than 1 km/km² of secondary roads, less than .05km/km² of highways, and less than .01 km/km² of interstate highways. Another pertinent finding was that habitat suitability was highest when power line densities were less than .06 km/km²; leks were absent where power line densities exceeded .2

km/km². With respect to communication/cellular towers, leks were absent when tower densities exceeded .08 km/km². Wisdom et al. reported that areas extirpated of sage grouse had 27 times the human density, 3 times more area in agriculture, were 60% closer to highways, and had 250% higher density of roads than what was found in occupied habitat. Also, it was found that power lines and cellular towers had significant impacts on whether or not a habitat was occupied.

BLM's own experts recommend a 4-mile No Surface Occupancy ("NSO") buffer for all active leks in Priority Habitats, Focal Areas, Connectivity Areas, and General Habitats for existing oil and gas leases and permitted activities that would potentially disturb breeding, nesting, and brood-rearing sage grouse, with exceptions available for mineral leases or claims located entirely within this buffer for a wellsite of minimal size and intrusion to be placed at a location most distal from an active lek or leks. Proposed stipulation NSO 11-80, by contrast, limits surface occupancy only within 0.6 miles of leks. Because the stipulation falls so far short of the scientifically-recommended conservation needs of the species, reliance on the stipulation alone, absent compliance with the directive to prioritize leasing outside habitat, fails either to comply with the Amended RMP or to justify its assumptions regarding adequacy for maintaining sage-grouse populations.

BLM, in its GRSG RMP Amendments, and in the proposed stipulations for these lease sales, implements buffer distances in accordance with the United States Geological Survey (USGS) Report as described in Appendix B to the GRSG RMP Amendment. These are set at 3.1 miles for roads and energy infrastructure, 2 miles for tall structures, and 1.2 miles for low structures, and represent the lowest (least protective) end of the protection spectrum described by Manier et al. (2014). These buffer distances are inappropriately small. While they may be adequate to protect breeding grouse on the lek, they will allow these disruptive and damaging features to be located in the midst of prime nesting habitat, which extends 5.3 miles from the lek site (Holloran and Anderson 2005).

Studies published by Braun in 1977 and Connelly in 2000 initially set the standard that leks should be buffered by a 3.2 km or 2 mile radius. However, more recent studies have suggested that the 3.2 km is inadequate for the conditions needed for successful breeding and nesting. Connelly et al. reported in their assessment for the Western Governors' Association that road traffic within 7.6 km had adverse impacts on male grouse attendance at leks. Sage grouse nesting grounds are located typically in a radius of 5.3 miles of the lek (and sometimes farther). Because the nesting period is equally sensitive and equally important to survival of and recruitment to sage grouse populations, larger buffers are necessary. Coates et al. (2013) found that for the Mono Basin sage grouse population, 90% of habitat use occurred within 4.66 miles of a lek. The Coates et al. results are conservative relative to activity patterns found for other sage grouse populations across the West.

The National Technical Team observed, "it should be noted that protecting even 75 to 80% of nesting hens would require a 4 mile radius buffer (Table 1). Even a 4 mile NSO buffer would not be large enough to offset all the impacts reviewed above." Importantly, a 0.6-mile lek buffer covers by area only 20% of the nesting habitat encompassed by a 4-mile lek buffer, which takes in approximately 80% of nesting grouse according to the best available science. BLM's own experts recommended for existing fluid mineral leases that a 4-mile NSO buffer

should be applied to leks, with an exception allowed in cases where the entire lease is within 4 miles of a lek, in which case a single wellsite should be permitted in the part of the lease most distal to the lek. This recommendation is reinforced by a similar recommendation from western state agency biologists, who also recommended a 4-mile NSO buffer.

Numerous other studies support the NTT's recommendations. It was found in one study that a 3 km buffer encompassed only 45% of the nesting females associated with that lek, while a 5 km buffer accommodated 64% of the nests. It was also reported that nests located within 1 km of another nest tended to have lower nesting success likely due to enhanced prey detection by predators. The same study further suggests that to protect and maintain sage grouse populations residing in relatively contiguous sagebrush habitats, managers should minimize or halt actions that reduce the suitability of nesting habitats within 5 km of a lek until detailed site specific monitoring suggested otherwise. It also noted that a substantial number of females nested distances greater than 5 km from a lek and that this additional increment of individual recruitment could be important for population viability.

Indeed, placing a heavy focus on habitat protection around leks is not suitable or sufficient for ensuring the viability of sage grouse populations. Studies have shown that both nest and brood rearing habitats are on average 6 km from leks, and it is not until 10 km from leks that one reaches the threshold where 90% of the habitat occurs. Johnsgard indicated that there was no obvious relationship between lek location and nest site. In 5 different studies involving more than 300 nests the average distance between lek and Sage-grouse nest where the females was first seen or captured was 3.5 mi (5.6 km). Nesting distances could be much greater than this average. For example, a majority (~90%) of nesting and brood-rearing habitat was within 10 km (6.2 miles) of active leks in Alberta; 97 percent of nests were found within 6.2 miles of leks where females were marked in the Powder River Basin in Montana and Wyoming. Walker et al. found in another study that the impacts from energy development on-lek persistence and nesting were still apparent at a distance of 6.4 km from the disturbance.

As previously mentioned, although leks are important focal points for breeding and subsequent nesting in the surrounding region, other seasonal use areas and habitat requirements may be equally limiting to sage grouse populations. Brood occurrence is greater in more heterogeneous sagebrush stands, where patchy cover reduces predator efficiency but still affords necessary for resources. Sage-grouse are more abundant in patchy habitats containing a mix of mesic, forb-rich foraging areas interspersed within suitable sagebrush escape cover." Broods are typically found in areas near nest sites for the first 2 to 3 weeks after hatching. Such habitat needs to provide adequate cover and areas with sufficient forbs and insects to ensure chick survival in this life stage.

Suitable and diverse winter habitats are critical to the long-term persistence of grouse populations. As summer ends, the diet of sage-grouse shifts from a diet of insects, forbs and sagebrush to one comprised almost entirely of sagebrush. In winter, the grouse depends heavily on sagebrush for cover, habitat selection being driven by snow depth, the availability of sagebrush above the snow, and topographic patterns that favorable mitigate the weather. Abundance of sagebrush at the landscape scale greatly influences the choice sagebrush dominate over 75% of the landscape with little tolerance for other cover types. Because appropriate wintering habitat occurs on a limited basis and because yearly weather conditions

influence its availability, impacts to wintering habitat can have large disproportional effects on regional populations. One study in Colorado found that 80% of the wintering use occurred on only 7% of the area of sagebrush available. Additionally, some degree of site fidelity to winter areas is suspected to exist, and wintering areas not utilized in typical years may become critical in severe winters.

Lower elevation sagebrush winter habitat used by sage grouse may also constitute important winter areas for big game and early spring forage areas for domestic livestock. Due to differing vegetative condition requirements, land treatments on lower elevation sagebrush areas to increase big game or livestock forage at the expense of sagebrush cover and density could have long-term negative consequences for the grouse.

None of these factors or impacts have been weighed or considered, under either NEPA or FLPMA and the BLM's own guidance regarding its prioritization objective. By failing to evaluate the adequacy of its sage-grouse stipulations, the site-specific impacts of authorizing non-NSO drilling, and the relative values of the parcels at issue for both grouse habitat and mineral potential, BLM's Final EA and Proposed FONSI both violate NEPA's hard look and alternatives requirements and FLPMA's requirement that implementing actions conform to approved Resource Management Plan.

Additionally, BLM's failure to consider site-specific impacts to greater sage-grouse is compounded by its failure to disclose or analyze the potential that these leases will be exploited for coalbed methane development. BLM's Miles City RMP EIS admits that, due to extensive habitat fragmentation from coalbed methane development, "[f]rom 2001 to 2005, GRSG populations declined by 82 percent within the expansive coal bed natural gas fields (Walker et al.2007a) in northeast Wyoming.

BLM Response:

The leasing EA tiers to the information and analysis and conforms to the decisions contained in the 2015 Rocky Mountain Region Record of Decision (ROD) and Miles City Approved Resource Management Plan (MCFO ARMP). The ROD and ARMP are in compliance with all Federal laws, regulations, and policy. The direct, indirect, and cumulative effects of oil and gas leasing across the Miles City Field Office were evaluated in the FEIS for the ARMP.

The Miles City Field Office RMP does incorporate the full multiple use policy of FLPMA. The MCFO RMP has areas prioritized for ACEC management, management of visual resources and/or National Scenic and Historic Trails, areas prioritized for the management of recreation and various wildlife species. The RMP also allows development of oil and gas and coal resources and put the suitable constraints on these development activities. There is a large portion of the RMP area that has major constraints on activities (e.g., exclusion areas for wind or other rights-of-ways, no surface occupancy for oil and gas, etc.). This RMP was developed under the FLPMA and NEPA requirements and follows multiple use and sustained yield requirements. This lease sale analyzed and attached all the appropriate stipulations to allow both development of minerals and protection of resources.

BLM analyzed all parcels in the EA to determine what stipulations from the RMP needed to be applied and if those stipulations are still adequate. The Miles City RMP is a very recent RMP and a robust

analysis was done on the stipulations and management actions for greater sage-grouse and all other resources. Priority Habitat Management Areas are a no-surface occupancy (NSO) stipulation for GRSG and General Habitat Management Areas are a combination of NSO and controlled surface use (CSU); therefore, providing high levels of protection for the species. The field office followed the prioritization requirement of the RMP, deferring these parcels for several sales since the RMP was signed (while other parcels in the field office were leased instead). These parcels have stringent resource protections for all resources (NSO, CSU), and the prioritization process was followed, as described below.

All lease parcels in question were nominated to the Montana State Office in February 2016. BLM implemented IM 2016-143 and prioritized the parcels. On the June 2017 Lease Sale, 87 parcels located outside of greater sage-grouse habitat were offered, along with 66 parcels in GHMA, and one in PHMA. Hence, with prioritization taken place in conformance with IM 2016-143, the remaining subject parcels were placed on this sale. Therefore, we followed the prioritization requirement to offer parcels outside of habitat, and then GHMA, while deferring parcels in PHMA.

The first two sales since the 2015 MCFO RMP did not lease in PHMA, and the third sale leased only 1 parcel, and this sale has 0 parcels. The BLM has prioritized leasing outside habitat since the 2015 MCFO RMP by deferring these parcels while other areas in the MCFO planning area were leased. EA at 265.

As disclosed in Chapter 3 of the EA, offering the 204 parcels for lease would have no direct effects on special status wildlife species and habitat. Any potential effects on wildlife resources from the sale of lease parcels would occur at the time the leases are developed at the Application for a Permit to Drill (APD) stage. For development to occur on a lease parcel, an APD must be submitted, at which time the field office completes NEPA analysis to disclose the impacts from development. A site-specific analysis to further avoid and minimize impacts to sage-grouse and sage-grouse habitat would occur at the APD stage when a specific proposal is identified. The analysis would include disturbance and density analysis to determine if the proposed actions is within limits established in the approved RMP. The analysis would also identify additional site-specific impacts that cannot be discerned or quantified at this time, and would identify the appropriate mitigation measures to be applied as conditions of approval to ensure the conservation and protection of all natural resources, including greater sage-grouse.

The Rocky Mountain ROD Table 1-4 summarizes the major components of the ARMPs and ARMPAs that address specific threats to GRSG and its habitat. Key Management Responses include "Prioritize the leasing and development of fluid mineral resources outside GRSG habitat." ROD at 1-19.

The Rocky Mountain ROD describes prioritization as an "objective" in the plans.

Prioritization Objective-In addition to allocations that limit disturbance in PHMAs and GHMAs, the ARMPs and ARMPAs prioritize oil and gas leasing and development outside of identified PHMAs and GHMAs. This is to further limit future surface disturbance and encourage new development in areas that would not conflict with GRSG. This objective is intended to guide development to lower conflict areas and as such protect important habitat and reduce the time and cost associated with oil and gas leasing development by avoiding sensitive areas, reducing the complexity of environmental review and analysis of potential

impacts on sensitive species, and decreasing the need for compensatory mitigation. ROD at 1-25.

This priority was not included as an allocation decision or management decision in the BLM's RMP revisions and amendments. To clarify how this objective would be implemented by the BLM, on September 1, 2016, the Washington Office issued Instruction Memorandum (IM) 2016-143. This IM only provides guidance on implementation of the land use plans, was not issued for public notice and comment, and therefore does not constitute rulemaking for the BLM.

The BLM is following the prioritization guidance described in IM 2016-143- Implementation of Greater Sage-Grouse Resource Management Plan Revisions or Amendments- Oil & Gas Leasing and Development Sequential Prioritization.

IM 2016-143 acknowledges the allowance of leasing in GHMA or PHMA, and the consideration of other factors.

This IM does not prohibit leasing or development in GHMA or PHMA as the GRSG plans will allow for leasing and development by applying prioritization sequencing, stipulations, required design features, and other management measures to achieve the conservation objectives and provisions in the GRSG plans. IM at 2.

BLM field offices should integrate the above prioritization sequence in their processing of pending permits as they consider the overall workload to fairly and objectively address their permitting prioritization. Only insofar as they are consistent with the prioritization approach described in this IM, BLM field offices may also take into consideration other prioritization considerations, such as considering permitting on a first-in/first-out basis to the extent possible, unit obligation wells, the efficiency to be gained in processing the easiest to complete first, the operator's drilling Plans, workload capacities, and other resource values. IM at 10.

The MCFO evaluated the parcels according to IM 2016-143 and determined that all parcels could be carried forward for analysis in the Leasing EA because the 2015 ARMP includes standards that conserve sage-grouse habitat, and the MCFO staff had sufficient resources to process and analyze all 204 parcels. Within RHMA, surface occupancy and use is prohibited for oil and gas development (NSO 11-79). Within GHMA, surface occupancy and use is prohibited for oil and gas exploration and development within 0.6 mile of the perimeter of greater sage-grouse leks (NSO 11-80), and surface occupancy and use may be prohibited within 2 miles of the perimeter of a lek active in the last five years (CSU 12-30). Had the MCFO parcel list been larger or if there were inadequate staff resources, the Montana Dakotas State Office, in coordination with the MCFO, could have deferred parcels in greater sage-grouse habitat in accordance with the prioritization sequence criteria and evaluation factors. However, for the December 12, 2017 Lease Sale, parcels were not deferred because MCFO staff were able to conduct the necessary analyses of all parcels.

IM 2016-143 also concedes that the BLM's implementation of its prioritization must be "subject to valid existing rights and any applicable law or regulation, including but not limited to, 30 U.S.C. 226(p) and 43 C.F.R. 3162.3-1(h)." IM at 12. The BLM must follow several statutory and regulatory timeframes for processing oil and gas leases, including those described in the IM. The BLM will

continue to comply with these requirements when apportioning agency resources and prioritizing individual permit applications that propose federal oil and gas lease operations, as the IM recognizes.

In the case of the nominated parcels sent to the Miles City Field Office for the December 12, 2017 Lease Sale, there are 187 parcels in BLM-designated habitat for greater sage-grouse.

The analysis area includes the following delineated greater sage-grouse habitat management areas: Restoration Habitat Management Areas (RHMA) with seven lease parcels, and General Habitat Management Areas (GHMA) with 180 lease parcels. Of the 180 in GHMA, there are 45 parcels within 2 miles of a greater sage-grouse lek and 11 parcels within 0.6 miles of a lek. The remaining 141 parcels are outside of the 2-mile sage-grouse lek buffer. For further discussion on greater sage-grouse habitat delineations refer to the MCFO ARMP Chapter 2, pages 2-1 through 2-16 (BLM, 2015a). EA at 27-28.

A lease parcel prioritization review was completed for the December 12, 2017 lease sale. Appendix D of the leasing EA, Lease Sale Prioritization Sequence Consideration Factors, describes the results of that analysis, and the MCFO rationale and methodology for complying with the greater sage-grouse plans and IM 2016-143.

The BLM's Authorized Officer, acting under the delegated authority of the Secretary of the Interior, has discretion to determine which public lands will be offered at a lease sale. The Mineral Leasing Act of 1920 (MLA), as amended, provides that lands subject to disposition under the Act "which are known or believed to contain oil or gas deposits may be leased by the Secretary." (30 U.S.C. § 226(a) (emphasis added)). When evaluating Expressions of Interest (EOIs) to lease particular parcels, pursuant to the Competitive Leases Handbook (H-3120-1), the BLM will plan for leasing and development in accordance with the objectives and provisions in the GRSG Plans. EA Appendix D.

Oil and gas leasing is in compliance with all Federal rules, regulations, and laws, including NEPA, MLA, and FLPMA. Areas open or closed to leasing, and leasing stipulations, are developed and analyzed during Land Use Planning, which includes public participation. The 2015 MCFO ARMP did not designate the parcel lands under review as closed to oil and gas leasing; therefore, MCFO applied the necessary RMP approved resource stipulations to the respective lease parcels, which include stipulations associated with sage-grouse and habitat management identified in the 2015 MCFO ARMP. See Appendix A. This includes CSU 12-30 for 18 parcels in GHMA, LN 14-37 for 180 parcels in GHMA, NSO 11-79 for 7 parcels in RHMA, and NSO 11-80 for 11 parcels in GHMA within 0.6 miles from lek. *Id.*

NSO 11-79- SAGE-GROUSE HABITAT – PRIORITY AREAS, WEST DECKER RESTORATION AREA, SOUTH CARTER RESTORATION AREA

Stipulation: Surface occupancy and use is prohibited within sage-grouse priority areas, West Decker Restoration Area, and South Carter Restoration Area.

Objective: To maintain and enhance the most important habitats needed by priority sage-grouse populations.

NSO 11-80- SAGE-GROUSE HABITAT- GENERAL HABITAT MANAGEMENT AREA

Stipulation: Surface occupancy and use is prohibited within 6/10 mile of the perimeter of sage-grouse leks.

Objective: To maintain the integrity of general sage-grouse habitat and promote movement and genetic diversity to support sustainable sage-grouse populations.

CSU-12-30- SAGE-GROUSE GENERAL HABITAT MANAGEMENT AREAS

Stipulation: Surface occupancy and use within 2 miles of the perimeter of a lek active within the past 5 years may be restricted or prohibited. Prior to such activities, a plan to mitigate impacts to breeding or nesting sage-grouse; or breeding, nesting, or brood rearing habitat will be prepared by the proponent and implemented upon approval by the AO.

Objective: To protect breeding, nesting and brood rearing activities and habitat.

LN 14-37- GREATER SAGE-GROUSE HABITAT CONSERVATION

The lessee/operator is given notice that prior to project-specific approval, the authorized officer may require mitigation measures and/or compensatory mitigation measures to conserve, enhance, and restore Greater Sage-Grouse (GRSG) habitat. The objectives of these requirements are to avoid, minimize, or compensate for unavoidable impacts associated with oil and gas development in order to provide a net conservation gain, which is a benefit or gain above baseline conditions, when the development occurs within GRSG habitat as specified in the Record of Decision for the Field Office's Approved Resource Management Plan (Sept. 2015). Site-specific GRSG habitat conservation, mitigation, or compensation requirements would be identified during the environmental review process and would be developed into the project proposal or as terms and conditions of the subsequent approval.

IV. CONCLUSION

The Protesters requested that the BLM withdraw 204 parcels from the MCFO, December 12, 2017, Competitive Oil and Gas Lease Sale. The Protesters contend that the BLM failed to analyze water quality and quantity impacts from future conventional oil and gas development on the Tongue River Reservoir, failed to analyze coal bed methane extraction impacts on the Tongue River Reservoir, and that BLM's failure to adequately disclose or analyze the impacts to greater sage-grouse violations BLM regulations regarding conservation of Bureau Sensitive Species and the Greater Sage-Grouse Resource Management Plan Amendments.

The BLM dismisses this protest for the reasons stated above.

The BLM, in accordance with existing regulations and policies, will not defer leasing actions and will offer for lease all 204 of the protested parcels described in the MCFO, December 12, 2017, Notice of Competitive Oil and Gas Lease Sale.

Administrative Review and Appeal

This Decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of the Secretary, in accordance with the regulations contained in 43 C.F.R. § 4 and Form 1842-1 (Enclosure 2). If an appeal is taken, the Notice of Appeal must be filed in the Montana State Office at the above address within 30 days from receipt of this Decision. The appellant has the burden of showing that the decision appealed from is in error.

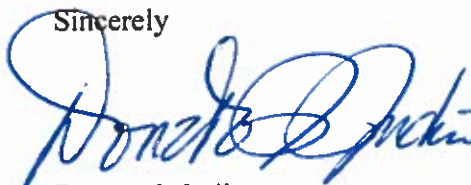
If you wish to file a petition for a stay of the effectiveness of this Decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay must show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for stay must be submitted to the IBLA and the appropriate Office of the Solicitor (see 43 C.F.R. § 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall be evaluated based on the following standards:

1. The relative harm to the parties if the stay is granted or denied;
2. The likelihood of the appellant's success on the merits;
3. The likelihood of immediate and irreparable harm if the stay is not granted; and
4. Whether the public interest favors granting the stay.

Sincerely



Donato J. Judice
Deputy State Director
Energy, Minerals, & Realty

2 Enclosures

- 1- CBD Protest Letter Dated October 13, 2017 (25 pp)
- 2- Form 1842-1 (2 pp)